

In the Claims:

1. A method for remediating a contaminated region of a subterranean body of groundwater to destroy or reduce the initial concentration levels of contaminants, comprising:
providing at least one injection point extending from above ground to the subterranean body of groundwater;
delivering substantially pure oxygen to said at least one injection point and into the subterranean body of groundwater; and
delivering an amount of microbials to said at least one injection point and into the subterranean body of groundwater to assist in reducing the level of contaminants.

2. The method of claim 1, further comprising:
providing a plurality of injection points extending from above ground to the subterranean body of groundwater.

3. The method of claim 2, further comprising:
providing a supply of oxygen in communication with each said plurality of wells.

4. The method of claim 3, further comprising:

Sub. 92

11/11/2011 11:11:11 AM

3 regulating the flow of oxygen from said
4 supply of oxygen to said plurality of injection
5 points.

1 5. The method of claim 2, wherein said
2 plurality of injection points are arranged in a grid
3 pattern.

1 6. The method of claim 3, wherein said
2 supply of oxygen is in liquid form.

1 7. The method of claim 6, further
2 comprising:
3 converting said liquid oxygen to oxygen
4 vapor.

1 8. The method of claim 1, further
2 comprising:
3 installing said at least one injection point
4 through GeoProbe installation techniques.

1 9. The method of claim 1, further
2 comprising:
3 installing said at least one injection point
4 through airjet installation techniques.

1 10. A system for naturally remediating a
2 contaminated subterranean body of groundwater to
3 destroy or reduce the levels of contaminants,
4 comprising:
5 a plurality of injection points extending
6 below ground to intersect the body of groundwater;

11/11/2011 10:10:10 AM

Sub 93

7 a supply of concentrated oxygen in
8 communication with each of said plurality of injection
9 sites;

10 a supply of microbials in communication with
11 each of said plurality of injection sites; and

12 a mechanism for conveying said concentrated
13 oxygen and said microbials to each of said plurality
14 of injection points.

1 11. The system of claim 10, wherein said
2 supply of concentrated oxygen is in liquid form.

1 12. The system of claim 10 further
2 comprising:

3 a control panel interposed between said
4 supply of concentrated oxygen and said mechanism for
5 conveying said concentrated oxygen to each of said
6 plurality of injection points to regulate the flow of
7 oxygen.

1 13. The system of claim 12, wherein said
2 control panel includes a plurality of flow meters for
3 regulating the flow rate of oxygen to said plurality
4 of injection points.

1 14. The system of claim 10, wherein said
2 mechanism includes a plurality of plastic tubes for
3 conveying said concentrated oxygen to said plurality
4 of injection points.

1 15. A method for remediating contaminated
groundwater, comprising:

Sub. 92

3 providing a supply of oxygen;
4 removing oxygen from said supply of oxygen;
5 regulating the pressure of said removed
6 oxygen;
7 injecting said oxygen into the groundwater;
8 and
9 providing a supply of microbials; and
10 injecting an amount of microbials from said supply of
11 microbials into the groundwater.

1 16. The method of claim 15, wherein said
2 supply of oxygen is in liquid form.

1 17. The method of claim 16, wherein said
2 removed oxygen is in vapor form.

1 18. The method of claim 15, further
2 comprising:

3 regulating the flow rate of said oxygen
4 injected into said groundwater.

1 19. The method of claim 18, further
2 comprising:

3 monitoring the levels of oxygen in the
4 groundwater to determine whether the flow rate of
5 oxygen needs adjustment.

odd 95 →